

Lecture 1

Introduction

August 2009

What is Macroeconomics?

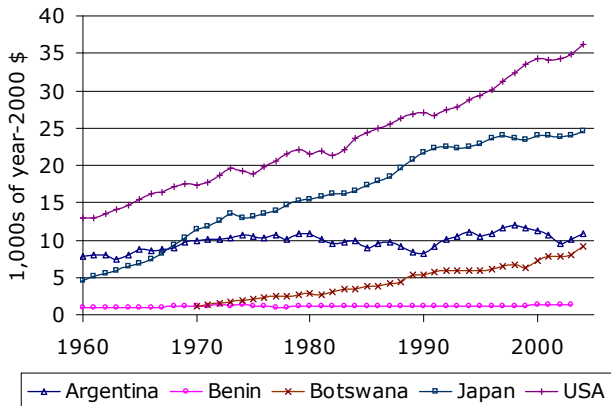
- **Macroeconomics:** The study of how aggregate economies behave.
- **Macroeconomics vs. Microeconomics:** Similar tools applied to different problems:
 - Microeconomics tries to explain the behavior of households and firms, and perhaps their interaction in a single market.
 - Microeconomics addresses **partial equilibria:** how prices and quantities are determined in individual markets.
 - Macroeconomics tries to explain the behavior of all households and firms, and their interactions in all markets.
 - Macroeconomics addresses **general equilibria:** how prices and quantities are simultaneously determined in all markets.

Three Macroeconomic Questions

- **Growth:** Why has per capita output grown, and why has it grown at such different rates?
- **Business Cycles:** Why does economic activity fluctuate?
- **Policies:** Can the government help?
 - Fiscal policy: taxes and spending
 - Monetary policy: supply of money
 - Regulatory and legal policy

Question 1: Economic Growth

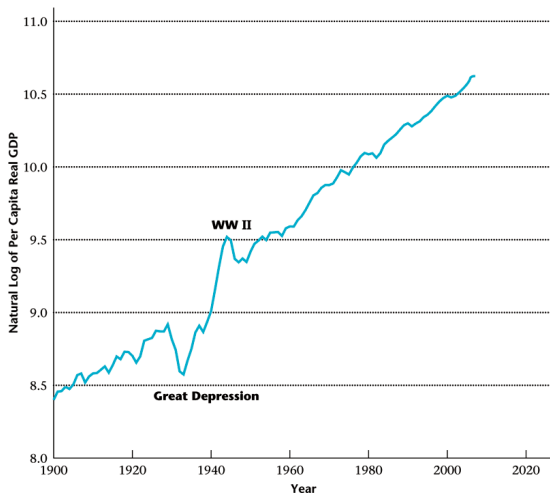
Real Output per capita, 1960-2004



Source: Penn-World Tables, chain-weighted data.

Question 2: Business Cycles

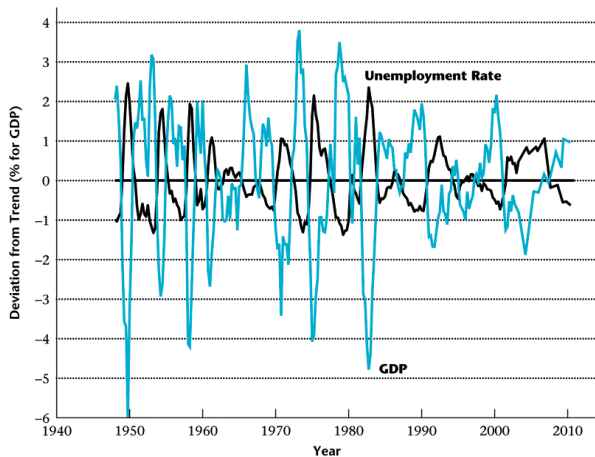
Figure 1.2 Natural Logarithm of Per Capita Real GDP



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Question 2: Business Cycles (continued)

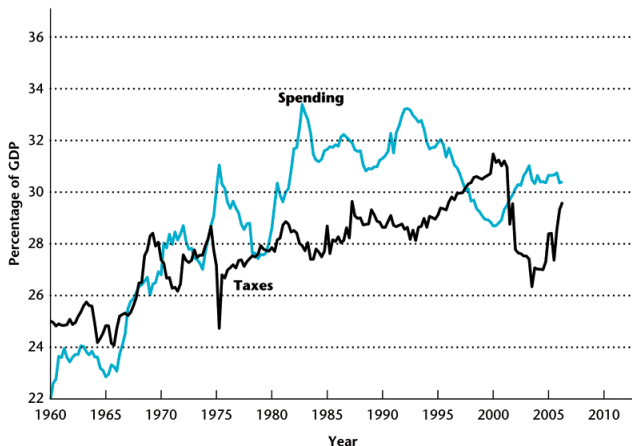
Figure 1.15 Deviations from Trend in the Unemployment Rate (black line) and Percentage Deviations from Trend in Real GDP (colored line)



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Question 3: Fiscal Policy

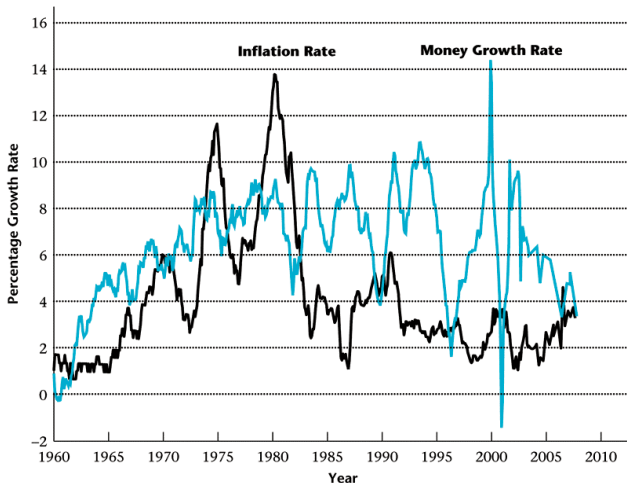
Figure 1.6 Total Taxes (black line) and Total Government Spending (colored line) in the United States, as Percentages of GDP



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Question 3 (continued): Monetary Policy

Figure 1.13 The Inflation Rate and the Money Growth Rate



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- What makes a good economic model good?
 - Makes good predictions. This is how we test models.
 - Simplicity: Omitting realistic features of actual economies is a virtue, not a vice. (Consider the features of a useful roadmap.)
- Problem: Economists cannot conduct controlled experiments, at least at the aggregate level.
 - In real economies, many events happen simultaneously, and it is hard to disentangle their effects.
 - We are not alone: consider the plight of climatologists.
- Positive vs. normative claims
 - Positive claims: a factual (data) statement.
 - Normative claims: value judgments.
 - Not independent: values influence data claims.

Building Macroeconomic Models

- Macroeconomic models include descriptions of:
 - The consumers and firms that interact in the economy.
 - The set of goods produced in the economy.
 - Consumers' preferences over goods.
 - The technologies available to firms for producing goods.
 - The resources available.
- **Behavioral assumption:** consumers and firms **optimize**, i.e., they do the best they can, given the financial and technological constraints that they face.
- **Equilibrium:** A definition of consistency between the actions of firms and the actions of consumers.
- Our preferred equilibrium concept is **competitive equilibrium**:
 - Firms and consumers take all prices as given.
 - Prices are such that supply = demand in all markets.

Why Microfoundations?

- **Microfoundations:** The detailed models of consumer and firm behavior used in models of the aggregate economy.
- **Previous Approach**
 - Until the 1980s, macroeconomic models were built by modeling the behavior of different “sectors” of the aggregate economy. There would be a model for aggregate consumption, a model for aggregate investment, etc.
 - The models for the various sectors were only loosely connected to microeconomic models.
- **Lucas Critique:** We cannot predict the aggregate effects of government policy changes without microfoundations.

The Macroeconomic Debate

- **Classical/Neoclassical Perspective:** Markets clear quickly, result is efficient, and the government cannot help.
- **Keynesian Perspective:** Markets are inefficient, and the government can help.
- Disagreement is over the short-run (business cycles). Most economists agree that markets clear in the long run.
- Important Events
 - Great Depression
 - 1970s stagflation

The Macroeconomic Debate (continued)

- Classical Models of Business Cycles:
 - Money surprise theory
 - Real business cycle theory
 - Market segmentation theory
- Keynesian Models of Business Cycles:
 - Traditional Keynesian model: wages or prices adjust slowly, and markets are not in equilibrium.
 - Coordination failure: markets clear, but externalities cause self-fulfilling waves of optimism and pessimism.

Major Results

- What is produced and consumed in an economy is determined jointly by its productive capability and the preferences of its consumers.
- In free markets, there are strong forces that tend to produce efficient economic outcomes.
- Sustained improvements in a country's standard of living are brought about by technological progress.
- What consumers and firms anticipate for the future has an important bearing on current events.
- Business cycles are similar, but they can have many causes.

Major Results

- Having money is much better than not having it. Once we have it, however, changing its quantity has no real effect.
- In the long run, inflation is caused by growth in the money supply.
- There may be a significant short-run trade-off between aggregate output/employment and inflation. But aside from the inefficiencies caused by long-run inflation, there is no long-run trade-off.

Principal Sources

- 1 Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, fourth edition update, (Addison-Wesley, 2003), chapter 1.
- 2 Stephen D. Williamson, *Macroeconomics*, third edition, (Addison-Wesley, 2007), chapter 1. (Figures downloaded from http://wps.aw.com/aw_williamson_macrocon_3/69/17800/4557009.cw/index.html.)